## ABSTRACT

An oxygen sensor is mounted in an exhaust path of an internal combustion engine. The status of an exhaust gas 5 is detected in accordance with the output of the oxygen The oxygen sensor incorporates a heater for heating an element of the sensor. In a region in which the temperature of the sensor element is below 300°C, an adsorbable species becomes adsorbed. In a region in which 10 the exhaust pipe temperature is above 80°C, the adsorbable species becomes adsorbed remarkably. Power supply control is continuously exercised over the heater so as to maintain the sensor element at a temperature of 300°C or higher until the exhaust pipe temperature drops below 80°C after an internal combustion engine stop. The power supply to the heater is shut off after the exhaust pipe temperature drops below 80°C.